JULY HEALTH TIP

Now that summer is here, so are the insects that can carry harmful diseases to humans. In this month's health tip we learn about two common insect-borne diseases—Lyme Disease and West Nile Virus (WNV).

Lyme disease is caused by a bacterium that is spread by the bite of a deer tick- you cannot catch it from another person. The tick must be attached to the body for at least 24 hours in order for the Lyme disease bacterium to be passed on to a person. Not every tick bite causes Lyme disease, but a person can get Lyme disease more than once.

About 70-80% of those infected with Lyme disease will get a rash where they were bitten. The rash starts as a small red round area, which usually expands to two or more inches across. The center of the rash may clear giving a "bull's eye" appearance. Other symptoms are fever, headache, tiredness, stiff neck, joint pain, and swollen lymph nodes. Without treatment, the heart, nervous system, or joints may be affected weeks to years later; the rash may also spread to other parts of the body.

Blood tests done in the early stage of illness can be negative, so early diagnosis is usually based on signs and symptoms. Most cases of Lyme disease can be cured with antibiotics, especially if treatment is begun early in the course of illness.

In 1999, WNV was detected in the United States for the first time, and since then it has spread across the country. WNV is a virus that is transmitted by the bite of an infected mosquito. Mosquitoes carry the virus after they have been infected from feeding on infected birds. In rare instances, WNV may be transmitted from human to human through organ donation, blood transfusion, breastfeeding, or from pregnant mother to fetus. WNV is NOT spread by casual contact such as kissing or touching a person infected with the virus.

Approximately 80 percent of people infected with WNV will show no symptoms at all. People who do develop illness may experience mild symptoms such as fever, headache, and body aches; occasionally a skin rash and swollen lymph glands may be noticed. These symptoms typically appear 3 to 15 days after the bite of an infected mosquito. Less than 1% of persons infected with the virus will develop serious illness- with those over age 50 being at highest risk. Although most people are at low risk for disease, those who spend a lot of time outdoors have a greater

risk of being bitten by an infected mosquito. No specific treatment for WNV infection exists. In severe cases, people may require hospitalization.

Of course, the most important thing we can do to prevent acquiring either of these diseases is to take protective measures.

- Avoid areas of high mosquito infestation and woods and tall grassy areas, which may be heavily infested with ticks.
- Keep the grass in your yard cut; remove leaves and leaf litter; clear brush from the yard.
- Avoid unnecessary outdoor activities at dawn and dusk when mosquitoes are most active.
- Use tick and mosquito repellent according to the directions on the product label.
- Wear light-colored clothing.
- Wear long pants and long-sleeved shirts. Tuck pant legs into socks and your shirt into pants when in areas where you may have frequent or prolonged exposure to ticks.
- Inspect your entire body as well as your pets for ticks after being outdoors.
- Remove an attached tick by grasping the tick close to the skin surface and pulling straight back with steady force; use pointed tweezers to grasp the tick. Clean the bite site after removing a tick and then wash your hands.
- Mark your calendar when a tick is taken off your body. This information will be useful to your doctor.
- Mosquitoes can breed in as little as 1/4 inch of water. Remove potential breeding sites by emptying standing water from flower pots, buckets and barrels; changing the water in pet dishes and replacing the water in bird baths weekly; keeping children's wading pools empty and on their sides when they are not being used; cleaning out rain gutters; and covering any water being stored outside.

If you believe you may be infected with either of these diseases, it is important that you contact your health care provider.

Please visit the "Health Information & Resources" page of the Health Department's website for more information on insect-borne diseases.

Resources

Lyme disease fact sheet, Maryland Department of Health and Mental Hygiene (DHMH), May 2002, www.edcp.org/html/cdindex.html

Lyme disease symptoms, Centers for Disease Control and Prevention (CDC), October 13, 2005, www.cdc.gov/ncidod/dvbid/lyme/ld_humandisease_symptoms.htm

West Nile Virus facts, DHMH, June 2006, www.edcp.org/html/cdindex.html

West Nile Virus: What you need to know, CDC, September 12, 2006, www.cdc.gov/ncidod/dvbid/westnile/wnv_factsheet.htm